JUN 1 - 1982

Mr. Nathan Lau
Water Management Division
EPA, Region IX
215 Fremont Street
San Francisco, CA 94105

Dear Mr. Lau:

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM, COMMENTS ON THE CALIFORNIA DIVISION OF OIL & GAS (CDOG) APPLICATION FOR PRIMACY OF CLASS II INJECTION WELLS

These comments on the subject application are submitted in response to your Notice of Public Hearing announcement dated April 29, 1982. We request that these comments be included as part of the administrative record of the public hearing proceedings of June 1, 1982, and June 3, 1982 involving the CDOG application for Class II primacy.

We are concerned with CDOG's list of nonhydrocarbon-producing aquifers that are proposed to be exempted as part of CDOG's application for primacy. This list was submitted by M. G. Mefferd, CDOG Supervisor, to you on March 29, 1982, as an amendment to the CDOG application. Our particular concern is with those aquifers on this list which contain formation water with a Total Dissolved Solids (TDS) concentration of less than 10,000 milligrams per liter (mg/l). Enclosed with this letter is a copy of the CDOG list for which the 34 aquifers with TDS levels less than 10,000 mg/l have been underlined. We are concerned that some of these aquifers may be of adequate quality and at shallow enough depths that potential beneficial uses may exist and need to be protected. Potential beneficial uses (agricultural, industrial, as well as municipal or drinking water sources) may be adversely affected by existing injection practices.

We understand that you are working with CDOG to develop procedures for an analysis of the nonhydrocarbon-producing aquifers on a case-by-case basis to determine which should be exempted. The policy of the State Water Resources Control Board (SWRCB), which is based on Section 13000 of the Porter-Cologne Water Quality Control Act, is that, "...activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible".

Aquifer exemption, if granted, should be fluid specific. In the case of any aquifers listed in CDOG's primary application, an aquifer exemption should be limited to production waters so as not to open the aquifer to the indiscriminate injection of other wastes. In addition, any aquifer exemption granted should be

The wells are only for Class II

limited to that portion of the aquifer that will be affected by the projects identified in the application in accordance with 40 CFR 146.04. This is what we proposed

Should EPA exempt these aquifers of concern on the basis that the aquifer could not serve as a drinking water source, the SWRCB could still prohibit these discharges if other potential beneficial uses, e.g., agricultural or industrial, are being threatened. In order that this situation does not come about, we request that your case-by-case analysis incorporate our concerns. You may wish to include the SWRCB and the appropriate Regional Board in the review of technical reports which support the aquifer exemption proposals for nonhydrocarbon-producing aquifers.

The Central Valley Regional Water Quality Control Board (Fresno) feels that it would be inappropriate to exempt the Midway-Sunset field alluvium listed on page B-5 of Table 1 titled "Non-Hydrocarbon Producing Zones Being Used for Waste Water Disposal" of CDOG's primacy application. The Regional Board feels that injection into this shallow aquifer could threaten present water supplies and result in the surfacing of fluids. A technical report to support this aquifer exemption request should address these concerns.

Please call Greg Williams at (916) 324-1251 should you have any questions on this matter.

Clint Whitney
Executive Director

Attachment

cc: Mr. Marty Mefferd
Mr. Robert Reid
CDOG
1416 - Ninth Street, Room 1310
Sacramento, CA 95814

Regional WQCB's Executive Officers

Tim Souther
Region 5, Fresno

John Richards
Office of the Chief Counsel

Par. LIST.	FIELD	FORMATION & ZONE	TDS OF ZONE WATER PRIOR TO INJECTION	TDS OF INJECTED WATER	VOLUME INJECTED (Barrels)	INJECTION STARTED	REMARKS
4	North Coles Levee	Tulare	12,900				
4	"	San Joaquin	40,000-45,600				
4	"	Etchegoin	30,100				
4	South Coles Levee	Tulare	12,000-13,300				
4	"	San Joaquin	12,000-16,900				
4	Greeley	Etchegoin	26,500				
4	Kern Bluff	Kern River	≈ 400- 900	(From Kern River Field) 600	551,500	7/80	
4	"	Vedder	≈ 7,800-16,100	" 11,700-213,000	4,099,000	3/80	
4	Kern Front	Santa Margarita	2,300	1,100		9/75	
4	Kern River	Chanac	238- 925	374- 865	1,071,000	6/77	Reclamation plant water injected
4	"	Santa Margarita	600- 2,600	475- 16,200	154,994,000	9/73	Scrubber and softener effluent injected
4	"	Vedder	7,800-16,200		33,204,000		
4	Lakeside	San Joaquin	21,500				
4	Los Lobos	Tulare	33,300*				
4	Midway-Sunset	Alluvium	No water	3,600- 25,700		7/59	
4	Mount Poso	Walker	2,800*	830- 1,440	22,632,000	9/75	
4	Mountain View	Kern River	4,660*	1,200- 3,800	3,681,000	12/65	
4	Pleito	Chanac & Kern River	7,900-11,800	12,800-30,800	889,000	8/74	
4	Poso Creek	Vedder	12,500				
4	Rio Viejo	San Joaquin	21,000*				Injection not started
4	Rosedale	Etchegoin	26,500	(Analysis from adjacent field)			
4	Round Mountain	Olcese	2,700	1,337- 1,965	29,797,000	7/74	
4	"	Walker	1,930	1,660 - 2,160	203,319,000	8/72	
4	Seventh Standard	Etchegoin	17,100-30,000	(NaCl only)			
4	Strand	Etchegoin	8,600	(NaCl only) 16,500-25,600 (NaCl only)	1,195,000	7/62	
4	"	San Joaquin	33,400				
4	Ten Section	San Joaquin	12,900				
5	Burrel	Santa Margarita	35,000	(Analysis from Helm field)			
5	"	Tulare-Kern River	20,500	(Analysis from S.E. Burrel field)			
5	Southeast Burrel	Tulare-Kern River	20,500				
5	Coalinga	Santa Margarita	8,244	3,100- 3,500	(145,000,000	2/63	
5	"	Etchegoin-Jacalitos	2,650- 2,900	2,650-2,700	(	2/63	
5	Gill Ranch Gas	Zilch	14,500				

"E" log calculation

NONHYDROCARBON-PRODUCING ZONE INJECTION DATA

DIST.	FIELD	FORMATION & ZONE	TDS OF ZONE WATER PRIOR TO INJECTION	TDS OF INJECTED WATER	VOLUME INJECTED (Barrels)	INJECTION STARTED	REMARKS
1	Belmont Offshore	Repetto	30,800				
1	Huntington Beach	Lakewood					
		Alpha 1	37,200				
		Alpha 2	12,500				
1	Sawtelle	Puente	25,500				
1	Seal Beach	Repetto	29,700				
		Recent Sands	30,200				
1	Wilmington	Gaspur	28,200				
1	"	River Gravels	30,800				
2	Ramona	Pico	5,000	15,300 ppm NaCl	1,793,000	6/51	
2	South Tapo Canyon	Pico	1,900 ppm NaCl	600 ppm NaCl	1,903,000	1/48	
2	Oat Mountain	Undiff.	4,800	23,800 ppm NaCl	91,000	4/56	
2	Simi	Sespe	4,300	25,500 ppm NaCl	695,000	6/48	
3	Guadalupe	Knoxville	30,500				
3	Lompoc	Lospe	119,000				
3	Lompoc	Knoxville	30,500				
3	Russell Ranch	Branch Canyon	13,000				
3	San Ardo	Santa Margarita	3,700	5,600	81,800,000	11/66	
3	"	Monterey "D" Sand	4,600	5,600	13,795,000	7/59	
3	"	Monterey "E" Sand	6,400	5,600	6,057,000	3/68	
3	Santa Maria Valley	Lospe-Franciscan	119,000				
3	Monroe Swell	Santa Margarita	3,700 ppm NaCl	9,600	?	1981	
3	Point Conception	Camino Cielo	26,200				
3	Guadalupe	Franciscan	30,500				
4	Bellevue	Etchegoin	26,500 (Analysis from adjacent field)				
4	Bellevue, West	Tulare	12,000*				
4	"	Etchegoin	26,500 (Analysis from adjacent field)				
4	Blackwell's Corner	Tumey	2,100 -2,600*	29,000 ppm NaCl	400,000	5/75	Idle since 1975
4	Buena Vista	Tulare	9,200	5,300-36,500	50,798,000	11/72	11 ppm boron
4	Cal Canal	Tulare-San Joaquin	Excess of 10,000*	22,000	537,000	5/79	
4	Canfield Ranch	Etchegoin	≈12,800-26,500 (Analysis from adjacent fields)				

*"E" log calculation

DIST.	FIELD	FORMATION & ZONE	TDS OF ZONE WATER PRIOR TO INJECTION	TDS OF INJECTED WATER	VOLUME INJECTED (Barrels)	INJECTION STARTED	REMARKS
5	Guijarral Hills	Etchegoin-Jacalitos	9,400	20,500	931,000	4/67	
5	Helm	Santa Margarita	35,900		(143,000,000		
5	"	Tulare-Kern River	5,100-23,900	11,600-43,400	(	12/52	
5	Jacalitos	Etchegoin-Jacalitos	33,749	5,500 (Cl only)	180,000	10/78	
5	Kettleman North Dome	San Joaquin-Etchegoin	10,000	23,800-31,200	48,608,000	8/64	
5	Raisin City	Pliocene	12,800-34,000				
5	"	Santa Margarita	35,000	(Analysis from Helm field)			
5	Riverdale	Pliocene	4,788-16,200		(72,626,000	7/57	
5	"	Santa Margarita	35,900	(Analysis from Helm field)	(		
5	San Joaquin	Pliocene	17,100				
5	San Joaquin,Northwest	Basal McClure	90,000	18,500	Test well-no injection		
5	Turk Anticline	San Joaquin	3,700- 4,440	9,500- 9,800	466,000	11/76	
6	Bunker Gas	Undiff.	1,200	11,000	388,000	1/75	
6	Grimes Gas	Kione	16,800				
6	Grimes, West, Gas	Kione	34,000*				
6	La Honda (South Area)	Vaqueros	41,000				
6	Lathrop Gas	Starkey	15,400*				
6	River Break Gas	Capay	6,900*	7,000	93,000	7/75	
6	Roberts Island Gas	Undiff.	18,000*				
6	Sutter Buttes Gas	Kione	2,500	4,600-23,000	644,000	7/77	
6	Union Island Gas	Mokelumne River	5,000-6,000*	7,800	471,000	7/77	
6	Wild Goose	Undiff.	2,800-5,000*	21,400	823,000	11/69	

* "E" log calculation